

DEFINITION

BY

RICHARD ROBINSON

FELLOW OF OHIEL COLLEGE, OXFORD

OXFORD

AT THE CLARENDON PRESS

§ 6. The ostensive method	117
§ 7. The rule-giving method	126
§ 8. The use of equivalences in word-thing definition	132
§ 9. The definition of the non-indicative functions of a word	135
§ 10. The traditional rules of definition	140
VI. REAL DEFINITION	
§ 0. Many persons have believed in real definition	149
§ 1. Real definition as the search for a nonexistent identity of meaning	152
§ 2. Real definition as the search for essence	153
§ 3. Real definition as description plus naming	156
§ 4. Real definition as word-thing definition misconceived	157
§ 5. Real definition as a tautology obtained directly from a nominal definition	158
§ 6. Real definition as the search for the cause	161
§ 7. Real definition as the search for a key	162
§ 8. Real definition as the adoption and recommendation of ideals	165
§ 9. Real definition as abstraction	170
§ 10. Real definition as analysis	171
§ 11. Real definition as synthesis	178
§ 12. Real definition as the improvement of concepts	180
§ 13. Conclusions about real definition	189
VII. DEFINITION IN MATHEMATICS	
VIII. SOME DISCUSSIONS OF DEFINITION	
INDEX	205

I

DISAGREEMENTS ABOUT DEFINITION

DEFINITION has been practised and discussed for nearly two and a half millenniums. It has been more widely adopted, and less often reviled, than any other part of the original theory of logic drawn up by Aristotle. To-day it is probably the best known idea in the field of logic, except for the idea of inference. The word 'definition' is more often used by the general public than any other peculiarly logical term except the word 'logic' itself. The magazine called *Science*, a weekly organ of the largest body of scientists in existence, hardly goes a month without printing assertions about definitions or definition in general, explicitly referred to as such. In the thirties the association of U.S. hotelkeepers was much concerned about the definition of 'hotel'. In the lawcourts big payments of money depend upon the judge's definitions. If a man's car is insured against 'collisions', and is then damaged by running into a body of floodwater pouring across the road, must the insurer pay? Can one 'collide' with water? What is the definition of 'collision'? If a haberdasher's stock of oiled raincoats heats up and chars without ever producing smoke or flame, can he collect fire-insurance? What is the definition of 'fire'? Every educated person is familiar with this notion; and even those who most heartily despise Aristotle's syllogism nearly always allow some value to definition, perhaps because they do not connect it so closely with Aristotle.

The purpose of this book, as a whole, is to clarify our conception of definition and to improve our defining activities. But the purpose of the present introductory chapter is not directly to increase clarity but rather to call to mind the obscurities that need clarifying. I here collect and contrast a few of the conflicting views that have arisen about definition in the course of man's long discussion of it. They make a somewhat bewildering set of ideas; but the survey of them shows what a need for clarification there is, and gives more point and value to the analytical work of the succeeding chapters.

§ 1. What is the Definition of 'Definition'? Here is a list of some of the most famous answers:

1. Plato gives the following three meanings of the word 'logos':
 - (a) Revealing one's thoughts by means of speech.
 - (b) When someone asks you what a thing is, being able to answer him by means of the elements of the thing.
 - (c) Being able to give some mark by which the thing asked about differs from all things.¹
2. Aristotle in the *Topics*, I 5, defines 'horos' as: the account of the essence of the thing.
3. Cicero: a certain brief and circumscribed account of the properties of the thing we wish to define.²
4. Milton: that which refines the pure essence of things from the circumstance.³
5. Spinoza: the true definition of each thing involves nothing and expresses nothing but the nature of the thing defined.⁴
6. Locke: making another understand by Words, what Idea the Term defin'd stands for.⁵
7. Kant: to present the complete, original concept of a thing within the limits of its concept.⁶
8. J. S. Mill: a proposition declaratory of the meaning of a word; namely, either the meaning which it bears in common acceptation, or that which the speaker or writer, for the particular purposes of his discourse, intends to annex to it.
9. Whitehead and Russell: a declaration that a certain newly introduced symbol . . . is to mean the same as a certain other combination of symbols of which the meaning is already known.⁷
10. Wittgenstein: Definitions are rules for the translation of one language into another.⁸

¹ *Theaetetus*, 206c-7a, 208c.

² *De Oratore*, I 42, 189. There is another definition of definition in *Ad Herennium*, IV 25, 35.

³ *Works* (1851), IV 168.

⁴ *Ethics*, I, prop. 8, n. 2.

⁵ *Essay*, III, III, 10.

⁶ *Critique of Pure Reason*, A 727, tr. N. K. Smith.

⁷ *Principia Mathematica*, 2nd ed., p. 11.

⁸ *Tractatus*, 3. 343.

11. Carnap: a rule for mutual transformation of words in the same language.¹

12. *Oxford English Dictionary*: to state exactly what (a thing) is: to set forth or explain the essential nature of . . .

b: to set forth or explain what (a word or expression) means; to declare the significance of (a word). (Part of the article on 'define'.)

Finally we occasionally hear it asserted that:

13. Definition is indefinable. (This may be defended on the ground that 'you cannot define anything until you already understand defining'.)

§ 2. Should a Definition be Brief? That a definition should be brief is included in Cicero's definition of definition quoted above. It is implied in Aristotle's *Topics* (VI 3); and is undoubtedly a very strong and persistent feeling. Yet the contrary view is also often held. Long and laborious processes of definition often occur. E. J. Nelson's definition of entailment takes more than a page to develop.² Dewey regarded the whole of his *Logic* as a direct or indirect expansion of his definition of inquiry (104-5). Santayana regarded the definition of beauty as occupying the whole of his book, *The Sense of Beauty* (see below, chapter V, § 7).

§ 3. Should Definitions come at the Beginning or at the End? In mathematical and physical works definitions of terms are most often found at the beginning of that portion of the work which uses these terms; and it seems that a term that needs definition must need it before, not after, it is discussed. On the other hand, the opposite view is frequently held. It is said to have been Goethe's view.³ It is certainly the view of E. F. Carritt in his *Theory of Beauty*, pp. 2-3: 'It would then be an absurdity to begin with a definition of beauty. To attain that is the object of our inquiry; and even in its proper place the definition would owe any value it possessed to the process by which it had been produced.' J. S. Mill's chapter on justice at the end of his *Utilitarianism*

¹ *The Unity of Science*, tr. Max Black, p. 39.

² *Mind*, 1930, pp. 443-5.

³ Fritz Maunher, *Beiträge zu einer Kritik der Sprache*, III 299.

does not lay down the definition of justice at the beginning but methodically seeks it. Frank Knight has a long, slow approach to a definition of freedom in *Ethics* III; for example, 'two essential steps by way of analysis and in the direction of sound definition can be made at once in general terms' (91). Often enough both views are stated or implied by the same man, without any suggestion that they need reconciling. For example, many of those who maintain that definition should come at the end probably have in mind those dialogues of Plato which consist in the gradual approach toward a definition. In most of those works the definition is never achieved at all; but if it had been found it would have been found at the end of the dialogue, and the implication of the whole procedure seems to be that definitions cannot be dogmatically asserted at the beginning but must be laboriously sought for in a procedure that takes a long time and indeed constitutes the meat of the work. Yet this same Plato lays it down in the *Phaedrus* that a speech should start with a definition to show what it is about; and this doctrine became a commonplace of the ancient rhetoricians and dialecticians.¹ Spinoza, writing his *Ethics* 'in the geometrical manner', puts definitions at the beginnings of the parts. Yet he collected his definitions of the passions at the end of his derivation of them, not at the beginning. Kant, however, reconciles the two views by distinguishing different sorts of definition.

§ 4. Are there Indefinables? Indefinability is constantly being asserted. 'It is logically necessary that some things should be indefinable', wrote A. C. Ewing in *Mind*.² Good is indefinable according to G. E. Moore's *Principia Ethica*. 'All' and 'assertion' appear to be indefinable symbols in the view of Dubislav.³ Poetry is indefinable according to A. E. Housman.⁴ Religion is indefinable according to C. C. J. Webb.⁵ Quality is indefinable according to S. C. Pepper.⁶ According to Tarski, 'truth' is indefinable in common speech, definable in 'poor' constructed languages, and inde-

¹ Prantl, *Geschichte der Logik*, usw., I 649.

² 1944, p. 79.

³ *Die Definition*, pp. 61-4.

⁴ *The Name and Nature of Poetry*, p. 47.

⁵ *Problems in the Relations of God and Man*, introduction.

⁶ *Aesthetic Quality*, p. 21.

finable in 'rich' constructed languages.¹ Plato's *Theaetetus* (201E) contains the earliest surviving version of the doctrine that 'the primeval letters or elements out of which you and I and all other things are compounded have no logos'. The doctrine has been common ever since; for example, it is in the Port-Royal logic. Locke regarded himself as the first person to inquire which are the indefinable words.² J. S. Mill held that proper names are indefinable because they are meaningless, and the names of the simple feelings are indefinable because the simple feelings are unanalysable.³ To Bertrand Russell, writing on *The Philosophy of Language*, it was an 'obvious truth' that 'we should incur a vicious circle if we did not admit some indefinable ideas';⁴ in the *Introduction to Mathematical Philosophy* he weakened the doctrine to the extent of being sure only that 'human knowledge must always be content to accept some terms as intelligible without definition, in order to have a starting point for its definitions. [It remains uncertain whether] there must be terms which are *incapable* of definition' (3-4). But in recent years indefinability has also been often denied. Cohen and Nagel wrote: 'That there must be undefined terms is clear from any attempt to define a term. . . . Nevertheless, it is a mistake to suppose that there are *intrinsically* undefinable terms.'⁵ And W. E. Johnson: 'The problem of definition, it is clear, must extend to *any* word, however it may be classified by grammar.'⁶

§ 5. Have Definitions a Truthvalue? The search for definitions in Plato's dialogues is represented as a search for a certain kind of true statement, and when proposed definitions are rejected it is usually because they are held to be false statements. But to-day it is often maintained that a definition cannot be either true or false, because it is not a statement but rather a command, not a proposition but a proposal.

§ 6. Should Definitions be Tautologies? Each side of this contradiction is often asserted. Davidson in his book on definition writes: 'Avoid tautology . . . the great pitfall of

¹ In *Studia Philoosophica*, I (Lwow, 1935) 266.

² *A System of Logic*, I viii, §§ 1, 2.

³ *Introduction to Logic*, &c. (1936), p. 142.

⁴ *Essay*, III. iv. 4.

⁵ 2nd ed., p. 18.

⁶ *Logic*, I 103.

lexical definers' (62). This view is embodied in the immensely common rule that a definition should not contain the name to be defined or any synonym for it. On the other side we have, for example, Fritz Mauthner and Louis MacNeice:¹

In the beginning and in the end the only decent

Definition is tautology: man is man,

Woman woman, and tree tree, and world world,

Slippery, self-contained; catch as catch can.

§ 7. Is Definition a Useful Procedure or not? Some declare that it is essential to define one's terms, and discussion with undefined terms is useless. Milton held that 'then only we know certainly, when we can define', and he based conclusions about the morality of divorce on a definition of marriage.² Refusing to give explanations of one's meaning is the sixth abuse of language according to Locke. Tarski hoped 'that languages with specified structure could finally replace everyday language in scientific discourse'.³

Others belittle the use of defining, or even explicitly refuse to define their terms, on the ground that a defined term fails to grasp the reality. R. A. Vaughan made one of his characters speak contemptuously of the 'poor definition-cutter, with his logical scissors'.⁴ 'Nothing new can ever be learned by analyzing definitions', writes Peirce. 'Nevertheless, our existing beliefs can be set in order by this process, and order is an essential element of intellectual economy, as of every other' (V 392). A thoroughly contemptuous account of definition is to be found in Fritz Mauthner's *Beiträge zu einer Kritik der Sprache* (III 299-310). 'I have no great opinion', wrote Edmund Burke, 'of a definition, the celebrated remedy for the cure of [uncertainty and confusion]. For when we define, we seem in danger of circumscribing nature within the bounds of our own notions.'⁵ He was feeling, I think, for the doctrine that a mathematically rigid insistence on using your words only in strictly defined senses will confine your possible discourse to the narrow sphere of mathematics, and prevent you, for example, from ever

¹ *Plant and Phantom*, 1941, p. 81.

² *Works* (1851), IV 168.

³ In *Philosophy and Phenomenological Research*, IV 347.

⁴ *Hours with the Mystics* (2nd ed., 1860), I 209.

⁵ *The Sublime and Beautiful*, Introduction.

talking politics or history. 'We are often deprived', wrote I. A. Richards, 'of very useful thoughts merely because the words which might express them are being temporarily preempted by other meanings', and he therefore urges us to use words in many senses.¹ Whitehead has written that 'insistence on hardheaded clarity issues from sentimental feeling, as it were a mist, cloaking the perplexities of fact. Insistence on clarity at all costs is based on sheer superstition as to the mode in which human intelligence functions.'²

§ 8. What are the Species of Definition? Into what sorts does it divide? The nature of the problem here may be suggested by making a list of names for sorts of definition found in good writers.

1. Real definition (most textbooks).
2. Nominal definition (most textbooks).
3. Extensive definition (Keynes).
4. Ostensive definition (W. E. Johnson).
5. Analytic definition (W. E. Johnson).
6. Synthetic definition (W. E. Johnson).
7. Equational definition (S. C. Pepper).
8. Descriptive definition (S. C. Pepper).
9. Operational definition (Bridgman).
10. Genetic definition (J. E. Creighton).
11. Definition in use (Whitehead and Russell).
12. Denotative definition (Levi and Frye).
13. Connotative definition (Levi and Frye).
14. Implicit definition (Gergonne).
15. Co-ordinating definition (Reichenbach).
16. Persuasive definition (Stevenson).
17. Successive definition (Lenzen).
18. Definition by description (Lewis).

§ 9. To What Sort of Entity does Definition apply? *Do we define things, or words, or concepts?* In other words, are we to be *realists*, or *nominalists*, or *conceptualists*, about definition?

When the notion of definition was invented by Socrates and Plato, only 'real definition' was thought of. That is, it was always *res* or things that required definition, never

¹ *Interpretation in Teachings*, p. 384.

² *Adventures of Ideas*, p. 91.